Tris(N-methylferrocenyl-N-(2-phenylethyl)dithiocarbamato-S,S′)cobalt(III) for anion sensing and preparation of cobalt-iron sulfide nanoparticles: a new photocatalyst for the degradation of dyes

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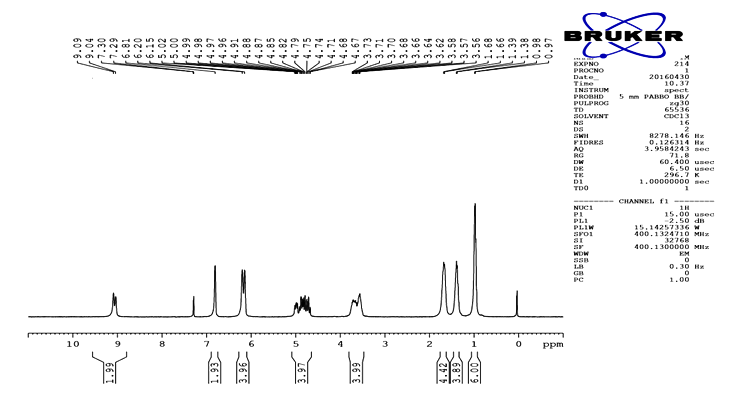
**Supplemental Materials**

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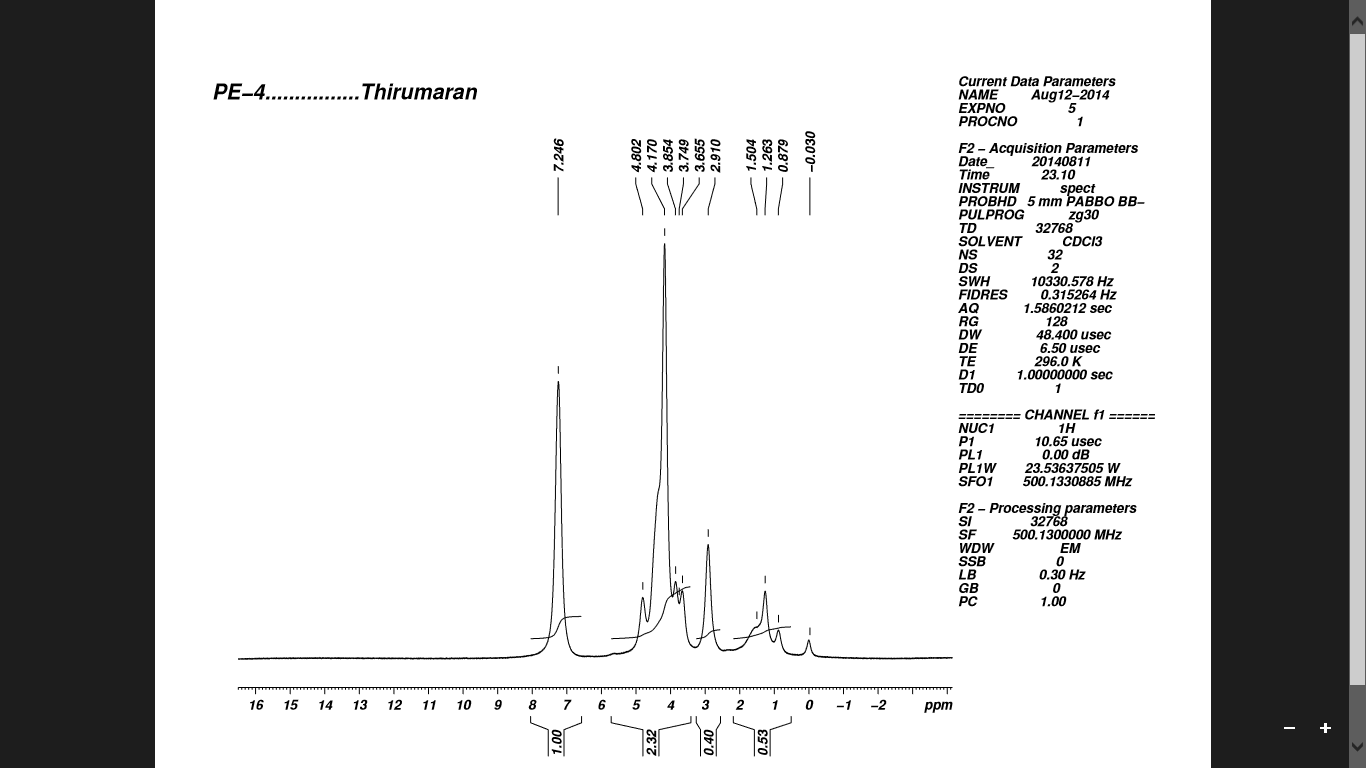
**Figure S 1. FT-IR spectrum of complex 1**

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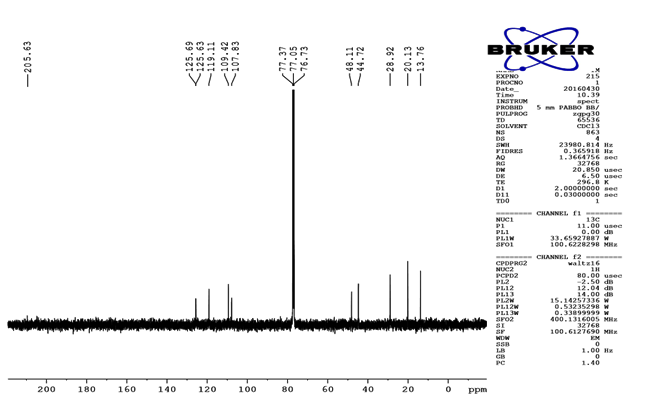
**Figure S 2. FT-IR spectrum of complex 2**

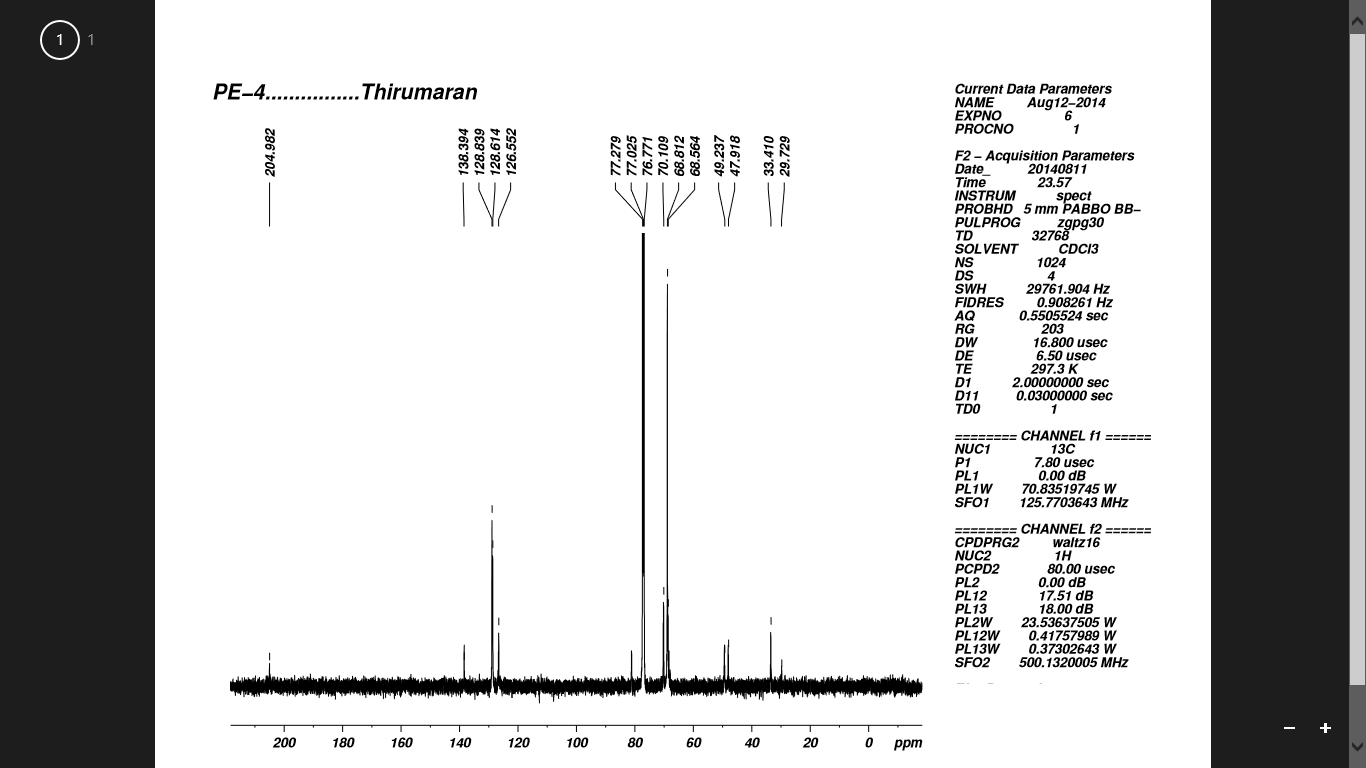
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**Figure S 3. 1H NMR spectrum of complex 1**

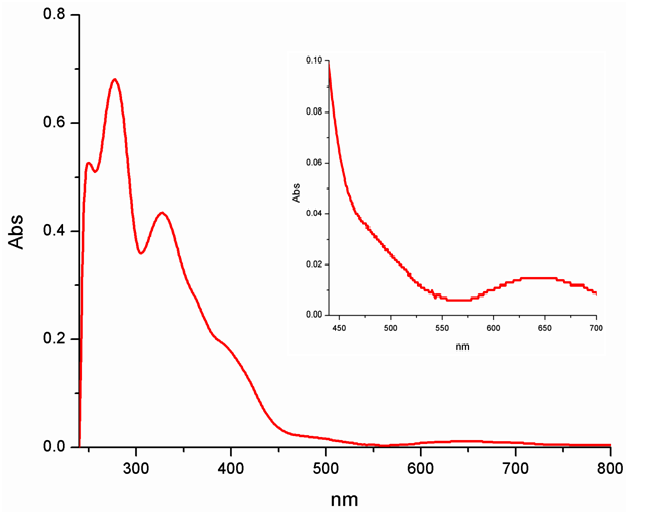
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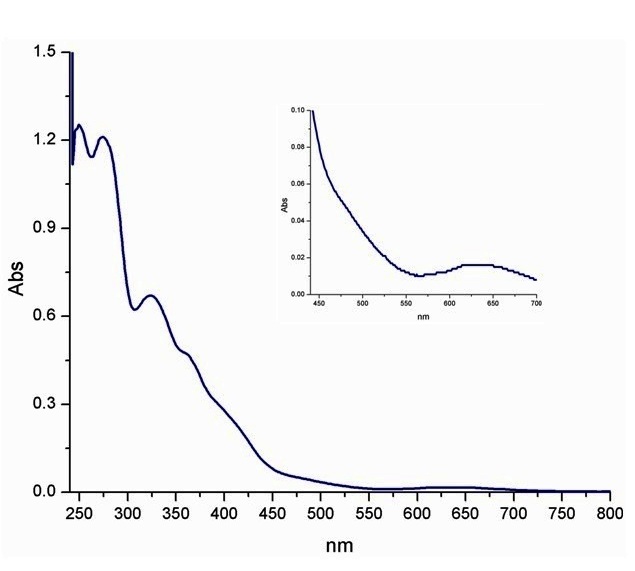
**Figure S 4. 1H NMR spectrum of complex 2**

**Figure S 5. 13C NMR spectrum of complex 1**

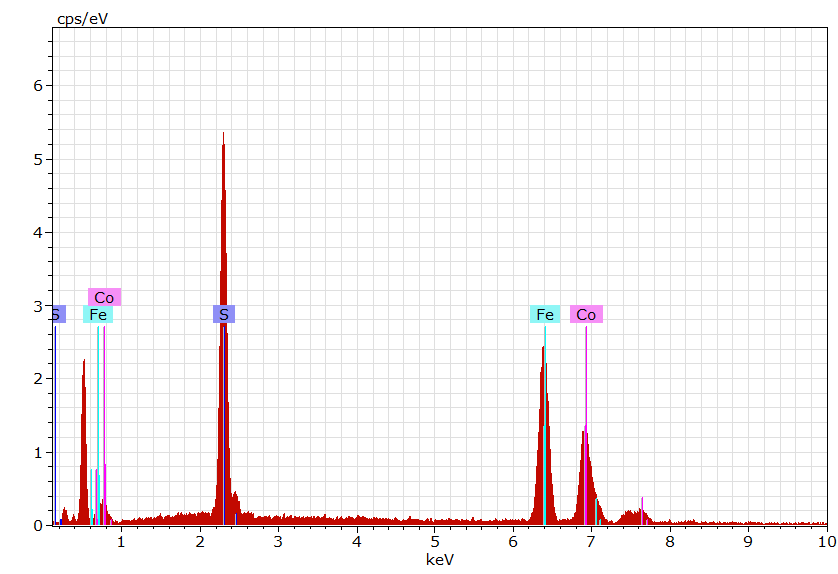
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**Figure S 6. 13C NMR spectrum of complex 2**

**Figure S 7. UV-Vis spectrum of complex 1**



**Figure S 8. UV-Vis spectrum of complex2**

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**Figure S 9. Energy dispersive X-ray spectrum of cobalt-iron sulfide**

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**Figure S 10. UV-Vis spectrum of cobalt-iron sulfide**

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**Figure S 11. PL spectrum of cobalt-iron sulfide**

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**Figure S 12. IR spectrum of cobalt-iron sulfide**